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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,918	10/12/2004	Ichizou Nakamura	121446	4876
25944 7590 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			10/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/510,918	NAKAMURA, ICHIZOU	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 15, 17, and 18 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) **Claims 1-11, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 417 (JP 2000-025417) in view of Potts et al (US 5,088,535) and Yang (US 2003/0047266).**

Japan 417 discloses a pneumatic motorcycle tire having a tread comprising main blocks 14, 18 and sub blocks 16. The negative ratio of the tread is at least 75%. The height of the sub blocks 16 is 40-80% of the height of the main blocks. One of ordinary skill in the art would readily understand that Japan 417's tread is made of rubber. In any event: it would have been obvious to one of ordinary skill in the art to provide Japan 417's tire such that the tread including the main blocks 14, 18 and sub blocks 16 are made of rubber since it is taken as well known / conventional per se in the motorcycle tire art to use rubber to form a block pattern tire tread for a motorcycle tire. Japan 417 teaches that the tire has remarkably improved skidding performance during cornering without impairing the traction performance on muddy ground. In particular, Japan 417 teaches that the third blocks 16 (sub blocks) resist flow of mud across the tire width between the cross direction block rows 14. This teachings indicates that sub blocks sink into the muddy ground. Japan 417 also teaches that the height of the sub blocks is lower than that of the main blocks 14 so that the flow of mud between the main blocks is not completely blocked up. This teaching indicates that mud should ride over the sub

blocks 16. Japan 417 does not recite providing the sub blocks 16 with a bending portion.

As to claims 1, 14 and 15, it would have been obvious to one of ordinary skill in the art to provide the sub blocks 16 of Japan 417's motorcycle tire for use on muddy ground (figure 1, figure 2, figure 4) such that the sub block has a beveled edge defining a mid bending point as claimed since (1) Japan 417, directed to a motorcycle tire, teaches that the sub blocks 16 should sink into the muddy ground to improve skidding performance while also allowing mud to flow over the sub blocks to prevent completely blocking the region between the main blocks, (2) Potts et al, directed to a bicycle tire or a motorcycle tire, suggests beveling blocks of an off-road tire so that during cornering the beveled block can sink into the ground to improve gripping action (col. 3 lines 13-28, 58-61, col. 6 lines 10-11) and (3) Yang shows beveling sub blocks in a tread of a bicycle tire (figure 2).

As to claims 2-4, note arrangement of main blocks 14, 18 and sub blocks 16 in the figures. In particular, note figure 2.

As to claims 5-7, the claimed block area ratio would have been obvious and could have been determined without undue experimentation in view of (1) Japan 417's teaching to add low height sub blocks 16 to improve skidding performance and (2) Potts et al's suggestion to bevel blocks to improve gripping action. As to the negative ratio, Japan 417 teaches using a negative ratio of at least 75%. As to the curvature ratio, Japan 417's tire is a motorcycle tire - such as tire having a relatively large curvature

ratio. As to the block height ratio, Japan 417 teaches a sub block 16 height of 40-80% of the main block height.

As to claims 8 and 9, the claimed limitations regarding the bending portion would have been obvious in view of the above noted suggestion from Potts et al to bevel blocks.

As to claim 10, Japan 417 orients the low height sub blocks 16 in the circumferential direction. See figures.

As to claim 11, it would have been obvious to one of ordinary skill in the art to provide Japan 417's pneumatic tire with a radial carcass since it is taken as well known / conventional per se in the motorcycle art to use radial tire construction for pneumatic motorcycle tires.

As to claim 17, note locations for Japan 417's sub-blocks (e.g. figure 2). Claim 17 does not incorporate all of the allowable subject matter described in the interview summary dated 7-13-07.

**3) Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 417 (JP 2000-25417) in view of Potts et al (US 5088535) and Yang(US 2003/0047266) as applied above and further in view of Japan 111 (JP 07-257111).**

As to claim 18, it would have been obvious to provide the claimed "depression" in view of Japan 111's suggestion to form an irregular surface as shown in figure 3, this additional structure providing improved tractive force. This teaching is applicable to Japan 417's sub-blocks since, although they have a lower height, they contact the ground when the ground is soft (e.g. muddy).

**Allowable Subject Matter**

4) **Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**Remarks**

5) Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 7-18-07 have been fully considered but they are not persuasive. Applicant argues and examiner agrees that the drawings in Yang are not to scale. However, Yang's figures convey some information instead of no information regarding block size. Applicant's arguments as to Potts et al are not persuasive since both Potts et al's beveled blocks and Japan 417's sub-blocks sink into the ground. This common desired feature indicates the applicability of Potts et al's beveling teaching to Japan 417's sub-blocks.

6) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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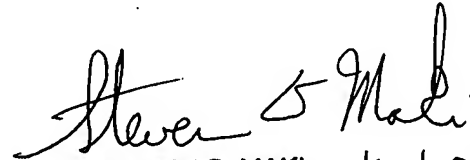
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki  
October 1, 2007

  
STEVEN D. MAKI 10-1-07  
PRIMARY EXAMINER